

**National Interagency Coordination Center  
Incident Management Situation Report  
Friday, November 29, 2019 – 0800 MT  
National Preparedness Level 1**

**National Fire Activity (November 22 – November 28, 2019)**

Initial attack activity:	Light (287 new fires)
New large incidents:	11
Large fires contained:	12
Uncontained large fires:***	2
Area Command teams committed:	0
NIMOs committed:	0
Type 1 IMTs committed:	0
Type 2 IMTs committed:	0

Nationally, there is 1 large fire being managed under a strategy other than full suppression.

\*\*\* Uncontained large fires include only fires being managed under a full suppression strategy.

[Link](#) to Geographic Area daily reports.

[Link](#) to Understanding the IMSR.

This report will post every Friday at 0800 Mountain Time unless significant activity occurs.

<b>Active Incident Resource Summary</b>						
<b>GACC</b>	<b>Incidents</b>	<b>Cumulative Acres</b>	<b>Crews</b>	<b>Engines</b>	<b>Helicopters</b>	<b>Total Personnel</b>
AICC	0	0	0	0	0	0
NWCC	0	0	0	0	0	0
ONCC	0	0	0	0	0	0
OSCC	1	3,126	2	9	1	135
NRCC	0	0	0	0	0	0
GBCC	0	0	0	0	0	0
SWCC	0	0	0	0	0	0
RMCC	2	1,919	0	6	0	14
EACC	1	0.5	0	3	0	19
SACC	10	18,738	0	14	0	88
<b>Total</b>	<b>14</b>	<b>23,783.5</b>	<b>2</b>	<b>32</b>	<b>1</b>	<b>256</b>

**Southern Area (PL 1)**

New fires: 129  
 New large incidents: 7  
 Uncontained large fires: 1

\* **Highway 50**, Oklahoma Division of Forestry, State Government Agencies. Mooreland, OK. Brush and short grass Minimal fire behavior with smoldering. Numerous structures threatened.

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* Highway 50	OK-OKS	764	---	90	Ctn	UNK	4	---	0	2	0	3	15K	ST
* Morewood	OK-OKS	432	---	100	Ctn	---	4	0	0	2	0	0	14K	ST
* Gage	OK-OKS	8,275	---	100	Ctn	---	8	---	0	4	0	1	93K	ST
* Olleninger	TX-TXS	430	---	100	Ctn	---	8	---	0	0	0	0	NR	ST
* Brittain Ranch	TX-TXS	2,100	---	100	Ctn	---	1	---	0	0	0	0	NR	PRI
* Kennedy Peak	VA-VAF	745	--	100	Ctn	---	23	-76	0	1	0	0	600K	FS
* Peacock	FL-MIR	4,196	---	100	Ctn	11/22	13	---	0	4	0	0	30K	FWS

TXS – Texas A&M Forest Service VAF –George Washington & Jefferson NF, USFS MIR – Merritt Island NWR, FWS

**Northwest Area (PL 1)**

New fires: 1  
 New large incidents: 0  
 Uncontained large fires: 0

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Large Fires Being Managed With a Strategy Other Than Full Suppression Without a Type 1 or 2 IMT Assigned														
341 Skookum Creek	OR-UMF	120	---	0	Comp	12/31	3	---	0	0	0	0	50K	FS

UMF – Umatilla NF, USFS

**Southern California Area (PL 1)**

New fires: 78  
 New large incidents: 1  
 Uncontained large fires: 1

\* **Cave**, Los Padres NF, USFS. Eight miles northwest of Santa Barbara, CA. Brush, chaparral and tall grass. Minimal fire behavior with smoldering. Structures threatened. Precipitation occurred over the fire area yesterday.

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* Cave	CA-LPF	3,216	---	70	Ctn	12/3	135	---	2	9	1	0	3.6M	FS

**Rocky Mountain Area (PL 1)**

New fires: 0  
 New large incidents: 3  
 Uncontained large fires: 0

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
* Eagle Nest	CO-PWX	4,521	---	100	Ctn	---	0	---	0	0	0	0	0	CNTY
* 2019-3354	KS-FRQ	1,000	---	100	Ctn	---	10	---	0	4	0	0	1K	DOD
* Sandhills	SD-RBA	919	---	100	Ctn	---	4	---	0	2	0	0	50K	BIA
Cherry Creek	KS-CNX	6,000	-4,000	100	Ctn	---	0	-80	0	0	0	0	150K	CNTY
Large Fires Being Managed With a Strategy Other Than Full Suppression Without a Type 1 or 2 IMT Assigned														
Cow Creek	CO-GMF	859	0	100	Comp	---	0	0	0	0	0	0	2.3M	FS

PWX – Prowers County FRQ – Fort Riley, DOD RBA – Rosebud Agency, BIA CNX – Cheyenne County  
 GMF – Grand Mesa, Uncompahgre and Gunnison NF, USFS

**Northern California Area (PL 1)**

New fires: 71  
 New large incidents: 0  
 Uncontained large fires: 0

Incident Name	Unit	Size		%	Ctn/ Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Crw	Eng	Heli			
Large Fires Being Managed With a Strategy Other Than Full Suppression Without a Type 1 or 2 IMT Assigned														
South	CA-SHF	5,332	0	100	Comp	---	0	-1	0	0	0	2	9.3M	FS

SHF – Shasta-Trinity NF, USFS

**Fires and Acres (by Protection) from November 22, 2019 to November 28, 2019:**

<b>Area</b>		<b>BIA</b>	<b>BLM</b>	<b>FWS</b>	<b>NPS</b>	<b>ST/OT</b>	<b>USFS</b>	<b>TOTAL</b>
Alaska Area	FIRES	0	0	0	0	0	0	<b>0</b>
	ACRES	0	0	0	0	0	0	<b>0</b>
Northwest Area	FIRES	0	0	0	0	0	0	<b>0</b>
	ACRES	0	0	0	0	0	0	<b>0</b>
Northern California Area	FIRES	0	0	0	0	67	4	<b>71</b>
	ACRES	0	0	0	0	512	78	<b>590</b>
Southern California Area	FIRES	0	1	0	0	75	2	<b>78</b>
	ACRES	0	0	0	0	47	0	<b>47</b>
Northern Rockies Area	FIRES	0	0	0	0	0	1	<b>1</b>
	ACRES	0	0	0	0	0	0	<b>0</b>
Great Basin Area	FIRES	0	0	1	0	1	0	<b>2</b>
	ACRES	0	0	0	0	1	313	<b>314</b>
Southwest Area	FIRES	0	0	0	0	0	0	<b>0</b>
	ACRES	0	0	0	0	0	0	<b>0</b>
Rocky Mountain Area	FIRES	0	0	0	0	0	0	<b>0</b>
	ACRES	0	0	0	0	0	0	<b>0</b>
Eastern Area	FIRES	0	0	0	0	0	6	<b>6</b>
	ACRES	0	0	0	0	0	1	<b>1</b>
Southern Area	FIRES	13	0	2	0	107	7	<b>129</b>
	ACRES	1,045	0	29	0	10,480	145	<b>11,67</b>
<b>TOTAL FIRES:</b>		<b>13</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>250</b>	<b>20</b>	<b>287</b>
<b>TOTAL ACRES:</b>		<b>1,045</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>10,968</b>	<b>537</b>	<b>12,580</b>

**Fires and Acres Year-to-Date (by Protection):**

<b>Area</b>		<b>BIA</b>	<b>BLM</b>	<b>FWS</b>	<b>NPS</b>	<b>ST/OT</b>	<b>USFS</b>	<b>TOTAL</b>
Alaska Area	FIRES	0	243	0	0	416	44	<b>703</b>
	ACRES	0	1,692,467	0	0	884,548	13	<b>2,577,028</b>
Northwest Area	FIRES	245	232	21	29	1,965	1,098	<b>3,590</b>
	ACRES	49,943	44,079	23,495	6	25,013	25,556	<b>168,094</b>
Northern California Area	FIRES	54	50	4	7	3,018	543	<b>3,676</b>
	ACRES	33	5,661	25	1	119,580	88,795	<b>214,096</b>
Southern California Area	FIRES	26	93	11	26	3,968	417	<b>4,541</b>
	ACRES	301	2,858	2,729	110	25,343	23,977	<b>55,318</b>
Northern Rockies Area	FIRES	750	46	22	16	882	480	<b>2,196</b>
	ACRES	12,081	887	10,026	116	39,148	11,741	<b>73,999</b>
Great Basin Area	FIRES	42	780	9	37	931	502	<b>2,301</b>
	ACRES	172	249,352	13	449	154,910	57,073	<b>461,969</b>
Southwest Area	FIRES	683	212	15	55	631	945	<b>2,541</b>
	ACRES	56,934	6,827	99	23,446	29,193	333,683	<b>450,183</b>
Rocky Mountain Area	FIRES	282	325	3	13	586	378	<b>1,587</b>
	ACRES	2,887	21,585	5,097	29	54,756	31,450	<b>115,804</b>
Eastern Area	FIRES	323	0	26	32	4,222	339	<b>4,942</b>
	ACRES	575	0	972	525	27,913	5,145	<b>35,130</b>
Southern Area	FIRES	267	0	40	54	20,386	393	<b>21,140</b>
	ACRES	24,238	0	6,781	2,577	406,997	24,435	<b>465,029</b>
<b>TOTAL FIRES:</b>		<b>2,672</b>	<b>1,981</b>	<b>151</b>	<b>269</b>	<b>37,005</b>	<b>5,139</b>	<b>47,217</b>
<b>TOTAL ACRES:</b>		<b>147,165</b>	<b>2,023,716</b>	<b>49,237</b>	<b>27,259</b>	<b>1,767,403</b>	<b>601,871</b>	<b>4,616,654</b>

<b>Ten Year Average Fires (2009 – 2018 as of today)</b>	<b>58,465</b>
<b>Ten Year Average Acres (2009 – 2018 as of today)</b>	<b>6,707,043</b>

\*\*\*Changes in some agency YTD acres reflect more accurate mapping or reporting adjustments.

\*\*\*Additional wildfire information is available through the Geographic Areas at <https://qacc.nifc.gov>

**Prescribed Fires and Acres from November 22, 2019 to November 28, 2019 (by Ownership):**

Area		BIA	BLM	FWS	NPS	ST/OT	USFS	TOTAL
Alaska Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Northwest Area	FIRES	2	0	0	0	0	8	10
	ACRES	677	0	0	0	0	730	1,407
Northern California Area	FIRES	1	0	0	2	7	2	12
	ACRES	10	0	0	63	1,809	1,390	3,272
Southern California Area	FIRES	0	1	0	0	0	11	12
	ACRES	9	6	0	0	0	1,333	1,348
Northern Rockies Area	FIRES	0	1	0	1	6	3	11
	ACRES	0	50	0	25	653	207	935
Great Basin Area	FIRES	0	2	0	0	4	2	8
	ACRES	0	2	0	0	126	536	664
Southwest Area	FIRES	0	0	0	0	0	0	0
	ACRES	0	0	0	0	0	0	0
Rocky Mountain Area	FIRES	0	0	0	0	1	5	6
	ACRES	0	0	0	0	10	277	287
Eastern Area	FIRES	0	0	0	0	0	1	1
	ACRES	0	0	0	0	0	2	2
Southern Area	FIRES	0	0	0	0	1,323	8	1,331
	ACRES	0	0	0	0	15,348	4,764	20,112
<b>TOTAL FIRES:</b>		<b>3</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>1,341</b>	<b>40</b>	<b>1,391</b>
<b>TOTAL ACRES:</b>		<b>696</b>	<b>58</b>	<b>0</b>	<b>88</b>	<b>17,946</b>	<b>9,239</b>	<b>28,027</b>

\*\*\*Prescribed fire acres are for reference only and may not reflect the most up-to-date information.

\*\*\*Official prescribed fire accomplishment reporting occurs through agency specific systems of record.

**Predictive Services Discussion:** A cold low pressure system will remain anchored over the West Friday. The system will be responsible for keeping temperatures at least 10-15 degrees below average. Moderate to heavy snowfall will be possible across Montana and Wyoming east of the Continental Divide. The system will wind up further as it moves into the northern Great Plains on Saturday spreading snow into the Dakotas. Another, warmer system will move into Northern California and southwestern Oregon by afternoon bringing more rain and mountain snowfall. Valley rain and mountain snow will continue in these areas into Monday while the rest of the West and the Great Plains begin to experience warmer and drier conditions with the development of a high pressure ridge over the Continental Divide. As the ridge of high pressure begins to move east late Tuesday, the storm system along the Californian Coast will dive south and move into the Southwest by Wednesday morning. A third, colder storm system will develop along the Washington Coast Wednesday night and move on shore Thursday bringing more mountain snow to the Cascades, Siskiyou, and the Sierra. In the East, periodic frontal systems will continue to bring moisture to the eastern half of the country. This should keep fire potential at bay.



<http://www.predictiveservices.nifc.gov/outlooks/outlooks.htm>

## Safety Zone Research

Operational Engagement

*[If you have computer or smart phone access, please watch the video for this subject using the link or QR code...Otherwise, read on Old School...]*



First, a Fire Behavior 101 refresher: You can warm yourself around the sides of a campfire for quite some time; that's **radiant heat**. If you hold your hands over the top of the fire, you'll get burned relatively quickly; that's **convective heat**.

Basically, wind or slope can tip the flames over, so that the convective heat is no longer going straight up, but is now aimed more along the ground, sending the heat and hot gasses much further ahead. This causes pre heating of the fuels, faster fire spread and greater fire intensities. You'll need a larger Safety Zone if that fire is coming towards you.

The current equation for safety zone size in the Safety Zone section (green) of the *Incident Response Pocket Guide (IRPG)*, PMS 461:

$$4 \times \text{Flame Height} = \text{Safe Separation Distance}$$

To make estimations of flame height though, you either have to use past fire behavior observations or use your experience to guess what the fire may do in the future. After a decade of research, Bret Butler, at the Missoula Technology and Development Center, suggests removing the uncertainty and guesswork that comes with estimating flame height by taking the general rule of thumb: Flame Height = 2 x Vegetation Height

...and substituting that Flame Height equation into the original IRPG equation, to give:

$$4 \times 2 \times \text{Vegetation Height} = \text{Safe Separation Distance}, \text{ which simplified is:}$$
$$8 \times \text{Vegetation Height} = \text{Safe Separation Distance}$$

But remember, that's still for **radiant heat** only, on flat ground, with no wind. To take into account the **convective heat** from slope or wind, Butler's research suggests that a "Slope Wind Factor" is needed in the equation:

$$8 \times \text{Vegetation Height} \times \text{Slope Wind Factor} = \text{Safe Separation Distance}$$

But what is the Slope Wind Factor? Current research is indicating that the Slope Wind Factor is between 1 and 10; with Butler arguing it may be closer to between 1 and 5. Butler's ongoing research is focused on answering that question by gathering sensor data on fires, running computer simulations, and refining the models...stay tuned.

In the meantime, utilize the calculations in the Safety Zone section (green) of your IRPG to help you determine a bare minimum size for your safety zone with the understanding that slope and wind need to be considered in your decision making.

But remember, a safety zone is only good if you can get there.

Resources: [Incident Response Pocket Guide, PMS 461](#), [Wildland Fire Safety Training Annual Refresher](#), [Wildland Fire Lessons Learned Center](#), [Wildland Fire Leadership Development Program](#)